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### REMARKS

Applicant affirms the election, with traverse, of claims 1-17 and 24-33. Accordingly, claims 20-23 are cancelled. Claim 3 is being cancelled as redundant.

#### **Rejections under 35 U.S.C. § 112**

Claims 12-14 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Claims 12 and 14 are now amended to remove the recitation of "Class I monomers" and "Class II monomers", although Applicant respectfully submits that the terms are defined in the specification, *inter alia*, on page 3, lines 16-17 and page 4, lines 29-32. Claim 12 now recites that the monomers are methacrylates, claim 13 now recites that the monomers are acrylates or styrenes, and claim 14 now recites that at least one monomer is a methacrylate and at least one monomer is an acrylate or styrene. Applicant submits that this amendment introduces no new matter but merely clarifies the language in the claims as filed, as supported by the specification.

#### **Rejections under 35 U.S.C. § 102 (b)**

Claims 1-17 and 24-33 were rejected under 35 U.S.C. §102 (b) as anticipated by Hawthorne, WO 87/03605 ("Hawthorne"). This rejection is respectfully traversed.

The Examiner has cited, in particular, Example 1 of Hawthorne, wherein "MMA in benzene in heated in the presence of a cobalt complex obtained by the contact of cobaltous acetate tetrahydrate, dimethylglyoxime, and pyridine in hydrogen to obtain oligo-MMA". Applicant respectfully submits that Example 1 of Hawthorne does not relate to the subject matter of the present claims.

In Example 1, there are two procedures being carried out. The first paragraph concerns the synthesis of the crystalline cobalt chain transfer catalyst ("Agent 1"). That procedure is carried out under hydrogen gas in the presence of methacrylonitrile. There is no reported polymerization of the methacrylonitrile. The second paragraph concerns the use of the material synthesized in the first paragraph as a chain transfer catalyst. The procedure states that the materials were deoxygenated prior to reaction, but the method of deoxygenation is not stated. There is no disclosure or suggestion of the presence of hydrogen gas or any other hydrogen atom donor being present during the polymerization.

Applicant further submits that in Example 2, and other examples of Hawthorne, polymerization is carried out in the absence of conventional free radical initiators and using a Co(III)-R catalyst. In contrast, the present claims recite the presence of both a chain transfer catalyst and a hydrogen atom donor.

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Thus, Applicant submits that Hawthorne does not disclose, teach, or suggest the presently claimed invention.

Claim 1-15, 24-30 and 33 were rejected under 35 U.S.C. § 102 (b) as being anticipated by Muir et al., U.S. Patent No. 5,684,101 ("Muir"). This rejection is respectfully traversed.

Muir discloses polymerization of MMA in the presence of an azo initiator. In contrast, the presently claimed processes utilize a chain transfer catalyst and a hydrogen atom donor molecule, in the absence of conventional free radical initiators. Applicant respectfully submits that Applicant does not understand the basis within the disclosure of Muir for the Examiner's rejection. Applicant further submits that Muir does not disclose, teach, or suggest the presently claimed invention.

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**CONCLUSION**

Applicant submits that all of claims 1-17 and 24-32 are patentable over the cited references and in condition for allowance. In view of the foregoing, allowance of the above-referenced application is respectfully requested.

Respectfully submitted,



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